"The Discovery, Use and Impact of Platinum Salts as Chemotherapy Agents for Cancer"

WELLCOME WITNESSES TO TWENTIETH CENTURY MEDICINE, Volume 30

EDITED BY D. A. CHRISTIE and E. M. TANSEY, The Wellcome Trust Centre for the History of Medicine at UCL, London, U.K., 2007, 117 pages, ISBN 978-085484-112-7, £6.00 (Print version), Free of charge (Online version)

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The Wellcome Witnesses to Twentieth Century Medicine Seminars bring together clinicians, scientists, historians and others interested in contemporary medical history who were associated with a particular set of circumstances or events. Participants come together to discuss, debate, and agree or disagree about their memories. The seminars are recorded, the tapes are transcribed and the unedited transcript is immediately sent to each participant, to check their own contributions and provide brief biographical details. The editors from the Wellcome Trust Centre for the History of Medicine at UCL (1) then turn the transcript into readable text. The purpose of these seminars is to promote interaction between these different groups, to emphasise the potential benefits of working jointly, and to encourage the creation and deposit of archival sources for present and future use.

This seminar on platinum salts, as they are described here (although this term may not be to the 'taste' of coordination chemists), describes the events surrounding a revolution in cancer chemotherapy. The topic is ideally suited to the Wellcome Witness Seminar series.

It is well known that Barnett Rosenberg and his coworkers at Michigan State University, U.S.A., are responsible for the discovery of the anticancer properties of cisplatin (2). In this book we hear of the nascent events that occurred, the people involved and their contribution, although unfortunately Rosenberg himself sent his apologies and did not participate in the discussion. In my view what is most fascinating about this transcript is the link between Rosenberg's fundamental experiments and the notion of a practical anticancer drug – and one based on platinum! The work of Rosenberg is frequently quoted, including the following statement: "I just thought, by intuition, I might try it" (3). It would be interesting to know how many people owe their lives to this throwaway comment; it must be hundreds of thousands, if not millions. We then learn about the subsequent clinical development of cisplatin, the dedication, determination and belief that was required to prove the utility of this compound.

In many ways the book is thought provoking – in today's culture of drug development, it is almost impossible to imagine how a maverick compound, which cisplatin was, could ever be developed, or how a modern equivalent to Rosenberg would be funded to do medical research. Dialogue between chemists in academia and medical doctors is probably at an all time low – everyone is too busy to talk to each other – and the legislation and costs associated with clinical trials prevent many putative compounds from being adequately evaluated. It is these cultural differences that make this book particularly interesting to me. It raises many questions: could such an amazing discovery happen today; can funding agencies provide an atmosphere to allow such processes to occur, or is it due to one or two truly brilliant scientists who are not afraid to go beyond their own areas of expertise? From

this book, we can certainly learn a great deal about the conditions required to develop a revolutionary anticancer drug, but I have my doubts whether these conditions could easily be emulated today. The process of discovering new drugs will only become increasingly difficult with time.

Even though the book is a little repetitive at times, it was enjoyable to read and enlightening in many ways. The entire text is available to download as a PDF file, free of charge, from the Wellcome Trust Centre website (3). Alternatively, a nicely bound paper copy can be purchased for £6.00. I doubt that this book would be a priority purchase for many chemistry or medical libraries in academia or industry, but I am pleased to have been asked to review this book as it is unlikely that I would have otherwise discovered it.

References

1 The Wellcome Trust Centre for the History of Medicine: http://www.ucl.ac.uk/histmed/

2 B. Rosenberg, L. Van Camp and T. Krigas, *Nature*, 1965, **205**, (4972), 698

3 "The Discovery, Use and Impact of Platinum Salts as Chemotherapy Agents for Cancer", Wellcome Witnesses to Twentieth Century Medicine, 2007, Volume 30: http://www.ucl.ac.uk/histmed/publications/wellcome_witnesses_c20th_med/vol_30

The Reviewer

Paul Dyson is a Professor of Inorganic Chemistry at the Swiss Federal Institute of Technology, Lausanne, Switzerland. He is currently the Director of the Institute of Chemical Sciences and Engineering and also heads the Laboratory of Organometallic and Medicinal Chemistry. His research interests are broad, encompassing aspects of biphasic catalysis in water and ionic liquids and the design and synthesis of ruthenium antitumour compounds.

The Wellcome Witness Seminar

The book is the transcript of a Witness Seminar held by the Wellcome Trust Centre for the History of Medicine at UCL, London, U.K., on 4th April 2006.

Participants included: Professor Paul Andrews, Professor Kenneth Bagshawe, Dr Penelope Brock, Professor Sir Kenneth Calman, Professor Hilary Calvert, Professor David Grahame-Smith, Professor Richard Gralla, Professor Kenneth Harrap, Dr James Hoeschele, Professor Ian Judson, Mr Wesley Miner, Professor Robert Naylor, Mrs Brenda Reynolds, Dr John Rudd, Dr Gareth Sanger, Dr Tilli Tansey, Dr David Tattersall, Professor Andrew Thomson, Professor Robert Williams, Dr Eve Wiltshaw.

Among those attending the meeting were: Dr Jeffrey Aronson, Dr Chris Barnard, Dr Barry Murrer, Dr Mark Walport, Mrs Julie Wenn, Dr Lise Wilkinson, Dr Tony Woods.